

Permit No. **VA0092479**
Effective Date:
Expiration Date:

AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Part I – Effluent Limitations and Monitoring Requirements, and Part II – Conditions Applicable To All VPDES Permits, as set forth herein.

Owner Name: Anderson Contracting Services
Facility Name: Abrahms Court STP
County: Stafford
Facility Location: Abrahms Ct, Stafford County

The owner is authorized to discharge to the following receiving stream:

Stream Name: UT, Aquia Creek
River Basin: Potomac
River Subbasin: Potomac
Section: 4b
Class: III
Special Standards: b, PWS

Thomas A. Faha
Director, Northern Regional Office
Department of Environmental Quality

Date

A. Effluent Limitations and Monitoring Requirements**1. Outfall 001 – 0.0036 MGD Facility**

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- During the period beginning with the permit's effective date and the issuance of the CTO for the 0.0036 MGD facility; the permittee is authorized to discharge from Outfall Number 001. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations					Monitoring Requirements		
	Monthly Average ⁽¹⁾		Weekly Average ⁽¹⁾		Minimum	Maximum ⁽¹⁾	Frequency	Sample Type
Flow ⁽²⁾ (MGD)	NL		NA		NA	NL	Estimate	TIRE
pH	NA		NA		6.0 S.U.	9.0 S.U.	1/D	Grab
CBOD ₅	5 mg/L	0.07 kg/day	8 mg/L	0.11 kg/day	NA	NA	1/M	Grab
Total Suspended Solids, TSS	6.0 mg/L	0.08 kg/day	9.0 mg/L	0.12 kg/day	NA	NA	1/M	Grab
Ammonia, as N (April 1 st –October 31 st)	1.0 mg/L	0.01 kg/day	1.5 mg/L	0.02 kg/day	NA	NA	1/M	Grab
Ammonia, as N (November 1 st – March 31 st)	2.4 mg/L		2.4 mg/L		NA	NA	1/M	Grab
Dissolved Oxygen	NA		NA		6.0 mg/L	NA	1/D	Grab
<i>E. coli</i> (Geometric Mean)	126 n/100 m Ls		NA		NA	NA	2/M	Grab
Total Phosphorus	0.18 mg/L	0.002 kg/d	0.27 mg/L	0.004 kg/d	NA	NA	1/M	Grab

⁽¹⁾ See Part I.B.

MGD = Million gallons per day.

1/D = Once every day.

⁽²⁾ The design flow is 0.0036 MGD.

NA = Not applicable.

1/M = Once every month.

⁽³⁾

NL = No limit; monitor and report.

2/M = Twice every month, >7 days apart.

S.U. = Standard units.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

B. Quantification Levels and Compliance Reporting**1. Quantification Levels**

- Maximum quantification levels (QLs) shall be as follows:

Characteristic	Quantification Level
TSS	1.0 mg/L
BOD ₅	5 mg/l
Ammonia	0.20 mg/L

- The permittee may use any approved method, which has a QL equal to or lower than the QL listed in B.1.a. above. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method.
- It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained.

Comment [CKM1]:

QLs for metals equal the lesser of 0.4 WLA₅ or 0.6 WLA₅ but not less than the lowest DEQ-certified metal specific method QL: Ag – 0.2 ug/L, As – 1.0 ug/L, Cd – 0.3 ug/L, Cr – 0.5 ug/L, Cu – 0.5 ug/L, Fe – 1.0 ug/L, Hg – 1.0 ug/L, Mn – 0.2 ug/L, Ni – 0.5 ug/L, Pb – 0.5 ug/L, Sb – 0.2 ug/L, Se – 2.0 ug/L, Zn – 2.0 ug/L. All other QLs are taken directly from 93-015, as amended. Noted that advice memo dated 12/04/00 from Dale Phillips gives QLs for BOD, TSS, TRC, O&G, COD, TKN, and Color.

3. Compliance Reporting for parameters in Part I.A.

- Monthly Average – Compliance with the monthly average limitations and/or reporting requirements for the parameters, except for nitrogen and phosphorus parameters, listed in Part I. A shall be determined as follows: All concentration data below the QL listed above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as it is reported. An arithmetic average shall

be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL then the average shall be reported as <QL. If reporting for quantity is required on the DMR and the calculated concentration is <QL then report <QL for the quantity, otherwise use the calculated concentration to determine the monthly average quantity.

- b. Maximum Weekly Average – Compliance with the weekly average limitations and/or reporting requirements for the parameters, except for nitrogen and phosphorus parameters, listed in Part I. A. shall be determined as follows: All concentration data below the QL listed above shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data reported is less than the QL then <QL shall be reported on the DMR. If reporting for quantity is required on the DMR and the calculated concentration is <QL then report <QL for the quantity, otherwise use the calculated concentration to determine the weekly average quantity.
- c. Any single datum required shall be reported as <QL if it is less than the QL in a. above. Otherwise the numerical value shall be reported.
- d. The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used (i.e., 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

C. Other Requirements and Special Conditions

1. 95% Capacity Reopener

A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Northern Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Northern Virginia Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

2. Indirect Dischargers

The permittee shall provide adequate notice to the Department of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
- b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.
- c. Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

3. Operation and Maintenance (O&M) Manual Requirement

The permittee shall develop an Operations and Maintenance (O&M) Manual for the treatment works. This manual shall detail the practices and procedures, which will be followed to ensure compliance with the requirements of this permit. The manual shall be submitted to the DEQ-Northern Regional Office for approval within 90 days of the issuance of the CTO. The permittee shall operate the treatment works in accordance with the approved O&M Manual. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Treatment system design, treatment system operation, routine preventative maintenance of units within the treatment system, critical spare parts inventory and record keeping;
- b. Techniques to be employed in the collection, preservation and analysis of effluent samples (and sludge samples if sludge analyses are required);
- c. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters;
- d. A plan for the management and/or disposal of waste solids, residues, Residue/Sludge Management and Disposal Plan; and
- e. Discussion of Best Management Practices, if applicable.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O&M Manual shall be deemed a violation of the permit.

4. Licensed Operator Requirement

The permittee shall employ or contract at least one Class III licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

5. Reliability Class

The permitted treatment works shall meet Reliability Class I.

6. CTC and CTO Requirement

The permittee shall, in accordance with *Sewage Collection and Treatment* regulation (9 VAC 25-790) obtain a Certificate to Construct (CTC) and a Certificate to Operate (CTO) from the Department of Environmental Quality prior to constructing wastewater treatment works and operating the treatment works respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

7. Financial Assurance and Disclosure to Purchasers

The permittee shall provide continuous coverage to implement the approved closure plan until released from financial assurance requirements by the State Water Control Board. If a transfer of ownership or operational control of this facility occurs, the permittee shall comply with the requirements of 9 VAC 25-650 until the new owner or operator has demonstrated compliance with the requirements of 9 VAC 25-650. Failure to maintain adequate financial assurance in accordance with 9 VAC 25-650 shall be a basis for termination of this VDPES permit.

During the term of this VDPES permit, the permittee shall revise the closure plan implementation cost estimate concurrently with any revision made to the closure plan which increases the closure plan cost. At a minimum, the permittee shall annually adjust the closure plan implementation cost estimate in accordance with 9 VAC 25-650 within 60 days prior to the anniversary date of the establishment of the approved financial assurance mechanism.

The permittee shall disclose the provisions of this permit to all purchasers of property served by this permitted facility in accordance with Section 55-519 of the Code of Virginia.

The approved financial assurance mechanism shall be filed with the State Water Control Board no less than 90 days prior to discharge to State waters. Discharge to State waters shall not be permitted unless and until an approved financial assurance mechanism is in place.

8. Treatment Works Closure Plan

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if the facility is permanently closed, the permittee shall submit to the DEQ-NRO a closure plan for the treatment works. The plan shall address liquid and sludge removal, odor control measures, structure and pipe removal, steps to prevent unauthorized access, fill materials, final grading and seeding. The plan should contain proposed dates for beginning and completing the work. The plan must be approved by the DEQ prior to implementation.

9. Water Quality Criteria Reopener .

Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

10. Sludge Reopener

The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

11. Sludge Use and Disposal

The Sludge Management Plan (SMP) is conditionally approved with the issuance of this permit, provided that a complete SMP is submitted and approved prior to commencing operation. Upon approval, the SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by the chosen sewage sludge use or disposal practices.

The permittee shall, within 120 days of the completion of construction, submit for DEQ approval a revised Sludge Management Plan (SMP). The SMP shall include information on sewage sludge and biosolids sampling and testing, operational testing and control and recordkeeping necessary to document the quality and proper use and disposal of sewage sludge and biosolids. The permittee shall conduct all biosolids use and disposal activities in accordance with the approved SMP, which becomes an enforceable part of the permit upon approval. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes.

12. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.